

The Challenge of Measuring Demand for Education

No single measure tells the complete picture, and many different economic and social dynamics are involved.



Years of economic downturn coupled with increasing postsecondary program enrollment and accelerating technological advancements have caused many to wonder if current educational systems are adequately designed to prepare the future workforce. The need to increase educational attainment levels of the emerging labor pool is a widely accepted notion. The benefit of achieving higher levels of education is manifested in numerous economic and social indicators such as earnings and professional expertise. What is not as obvious is exactly what educational attainment will be needed to meet future workforce demand.

In executing its fundamental role of uplifting society, our educational system must also address the particular needs of various population groups, from the citizenry who benefit from interacting with knowledgeable cohorts, to the businesses in need of workers to produce their goods and services, to the individuals who seek to gain specialized knowledge in particular sciences and arts. That said, current trends have put significant pressure on educational institutions here in Utah and across the nation to ensure that the instruction they provide meets the needs of an ever-changing, technology-based economy. Herein lies the challenge: identify the degrees that will optimize the realization of full economic growth potential and the fields of study that will equip graduates with the knowledge, skills and abilities needed in the current and evolving workforce.

One way to estimate future demand for education is to examine occupation projections produced by the Bureau of Labor Statistics (BLS) and then compare them to degree types typically offered. Depending on the occupation and field of study, this can be a straightforward matching process. For example, individuals who desire employment as a certified public accountant can pursue a degree in accounting. However, there are multiple fields of study and occupations where there simply is not a one-to-one match.

Another approach is to analyze the levels of education that will be needed to fill expected job openings. BLS projections suggest less demand for postsecondary education in 2018 than other research has purported. In the extreme, the BLS estimates could even indicate that overeducating our future workforce should be a concern. However, given that higher educational attainment levels have consistently correlated to higher wages and lower unemployment rates, it is clear that education is valued in the marketplace and over-education is not likely.

To better understand this apparent contradiction between BLS predictions and past trends, a few facts should be noted. First is understanding how BLS assigns training and education levels to occupations. The assignments are meant to reflect how a typical worker in an occupation acquires the skills necessary to enter that occupation.

Second, the BLS analysis does not reflect any labor supply information, so the competitive nature of any single

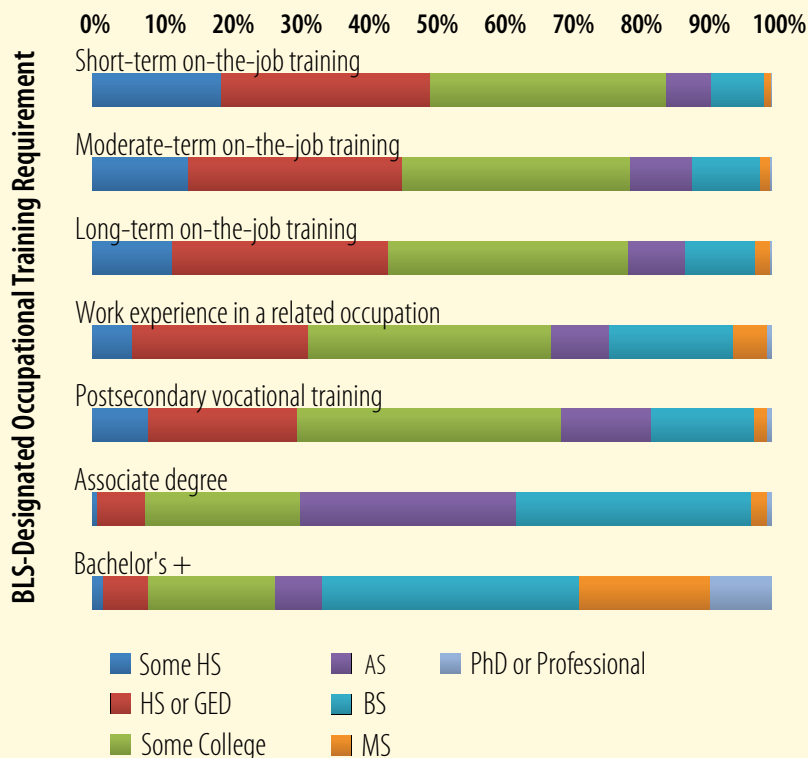
occupational labor market is not fully reflected in the education and training assignment. For example, BLS assigns nurses an education level of associate degree; while 46.7 percent of nurses in Utah have associate degrees, another 45 percent have bachelors' degrees. Depending on economic conditions at a given time period, competition may drive individuals to acquire a bachelor's degree even though the requisite skills can be acquired in an associate program.

Third, the broader labor market is fluid. Most individuals in the labor force will likely change occupations multiple times over their career. Many people enter the labor force well before they have achieved their highest education level, and as such will be employed for a portion of their career in occupations requiring lower skill levels than that which they actually aspire to achieve. While roughly 60 percent of projected Utah jobs don't require formal education for entry, it is possible that a significant portion of those jobs are held by individuals who will eventually end their career in an occupation that requires a higher level of education and training. In that respect, the availability of lower-skilled jobs can be seen as an economic structure to support students as they pursue higher education that qualifies them for occupations that require more knowledge and skills.

Measuring the demand for education brings together many different economic and social dynamics. No single measure tells the complete picture, and multiple measures representing all the dimensions that determine demand must be synthesized in order to best guide policy-makers and the general public in allocating resources for education. ①



Utah Educational Attainment by Occupation Training Level



Educational Attainment

Source: Author's calculations, based on American Community Survey, Bureau of Labor Statistics and Department of Workforce Services, 2010.